## **ABSTRACT**

Title: Memory Tag, Read/Write Device and Method of Operating a Memory Tag

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A memory tag has a non-volatile memory in which in use data is stored, an antenna coil and power supply circuit such that in use the memory tag is powered by inductive coupling. The memory tag also has a sensor for receipt of transmitted light carrying input signals and a processor for processing of the received input signals, and a modulation circuit for overlay of output signals onto the power supply circuit.

A read/write device, for communication with the memory tag has a signal generator, an antenna coil and a power supply circuit for powering the memory tag in use by inductive coupling. The read/write device further includes a light emitter for emission of the light carrying the input signals to the memory tag, and a demodulation circuit for retrieval of the output signals from the inductive coupling.